The WATER WELLSPRING

A FLOWING SOURCE OF INFORMATION FOR WATER AND WASTEWATER UTILITIES

Summer 2010

Responding to Customer Concerns About Water Quality

Water utilities strive to provide clean, safe drinking water for their customers. Water utilities should take all precautions in protecting their water supply and water sources. Advising customers of the potential dangers of improperly disposing of household waste, chemicals, and pharmaceuticals into the water system will prevent contamination of the surface water or ground water supply. However, a water utility may need to issue a drinking water advisory and warn their customers to boil the water -- or not drink the water -- until further notice from the utility. These advisories often cause customer confusion, frustration, and lack of trust in the utilities' water quality. In addition to providing customers with a yearly report on water quality, water utilities can ease customers' concerns by being proactive in communicating about water quality. A few suggestions are as follows:

- Provide water advisory information to local television or radio stations
- Post the information on the utility's website and at the entrance to the affected subdivision

The more information the utility can provide the customer on the status of the water advisory, the fewer complaints the utility is likely to receive. Customer outreach after an advisory can help a company evaluate its response to the water advisory. Water utilities may want to follow up with a bill insert or a letter to the customer explaining why the advisory was issued, what happened during the advisory, and what steps the utility has taken to prevent a repeat of the advisory. Utilities may want to obtain feedback from their customers on how well the utility provided information on the water advisory or any improvements the utility could make. Feedback from the customers will help the utility prepare for any future notifications.

Utilities should also remember that PSC Regulation 103-514 and 103-714 requires utilities to keep records of interruptions of service and to notify the ORS of any interruption lasting more than six hours and to provide the ORS Consumer Services Division a copy of all advisories affecting 10 or more customers within 24 hours of issuance. The utility is to advise the ORS Consumer Services Division in writing when the advisory is lifted.

US EPA News

Preparing For an Emergency

The US Environmental Protection Agency (EPA) has a link on their website of suggested pre-hurricane activities for water and wastewater utilities. This list is also useful for preparing for any emergency or incident. Visit the EPA's website at http://www.epa.gov/safewater/hurricane/pre-hurricane.html for a complete preparation list. The EPA suggests water and wastewater utilities prepare the following:

1. Identify and schedule emergency operations and cleanup crews. This effort could consist of heavy equipment and extra personnel to assist in clean-ups after the storm or incident
2. Notify state and federal agencies of location and telephone numbers of the emergency personnel owner/operator for the water system operations. For public water systems, be sure to line up contacts to request an emergency water supply, if necessary.
3. Review your emergency response plan for accuracy and make sure contact information is current. Notify in advance and set up clear lines of communication with local police and fire departments, in case of an injury or other emergencies. Request that local law enforcement check on any water staff that remains on-site at the water system. If communication channels are down with these sites, this check needs to continue on a routine basis until communication channels are re-established
4. Establish which media outlets you will use for customers to access information and press advisories. Be sure to prepare customers for a possible boil-water advisory.
5. Inspect water system source and treatment facility for security concerns. Test backup lights and generators. For all water systems, check backup pumps and controls. Check backup chemical feeders and all pumps and motors. Verify that spare pumps, motors, and other necessary spare parts are available.
6. Shut down exposed pipes at waterway crossings to prevent loss or contamination of potable water if the pipes break.
7. Secure important records, including the plant operations manual and water system mapping,
8. in a well protected location. Check bacteriological sampling materials -- be prepared for increased or special monitoring after the storm
9. All pump stations should be in a well drained area and be designed to remain in operation during flood events. If not, the pumps should be shut down and protected from electrical damage if they become submerged. After any major storm event, check raw water intakes to minimize any debris or other materials that could enter.
10. Any wells that become submerged must be disinfected prior to returning to service
11. Check that all chemical bulk storage tanks are properly labeled to include chlorine cylinders and chemical mix tanks. This will help in identification if these items are washed away or carried away by the wind. Check the chemical inventory. A storm event could cause a greater demand for disinfectant to address broken waterlines and increases in turbidity, so more disinfectant and coagulant chemicals may be required.
12. Monitor tank levels. Fill elevated- and ground-storage tanks to full capacity. Storage tanks should be valved off from the distribution system immediately prior to the storm event to prevent loss of water during the storm

Utilities are advised to make sure all essential personnel are trained to shut down and start up the system in case of emergency. In addition, utilities are to contact DHEC and the ORS if a plant is taken off-line or if they are unable to operate the water or wastewater system.

How Efficient is Your Water System? Take the Quiz!

The Federal Environmental Protection Agency (EPA) has established an industry goal of 10 percent for unaccounted water-system losses. Take the following quiz offered by the NY Office of the State Comptroller to calculate unaccounted-for water loss to see if your water company's losses are higher than the EPA's standards.

1. Number of gallons produced by the water system _____
2. Number of gallons of authorized water used _____
3. Subtract line 2 from line 1. This is the unaccounted for water. _____
4. Divide line 3 by line 1 and multiply by 100%. This is the percent of unaccounted for water. _____%
5. Subtract 10% from the percentage on line 4 (10% is the industry goal for losses) _____
6. Multiply line 1 by line 5 _____
7. Multiply line 6 by existing water rate. This is the dollar value of excess unaccounted-for water. _____

Surprised at the results? Is your system costing the utility money? If so, the utility may want to examine different solutions to save money including:

- Water audits
- Meter replacement
- Improved billing/accounting software
- Replacing infrastructure
- Controls on distribution system and unmetered use

All water systems can benefit from a water accounting system to identify areas of unaccounted-for water loss such as meter errors, accounting procedure errors, illegal connections, storage tank overflows, theft, and underground leaks. Water audits should be performed annually to help the utility adjust priorities, monitor progress, identify system losses, and establish new maintenance goals.

The Audit Corner

Contributions in Aid of Construction ("CIAC")

What are Contributions in Aid of Construction?

- Any donations or contributions in cash, services, or property from states, municipalities, or other governmental agencies, companies and individuals for construction purposes.

What are some examples of Contributions in Aid of Construction?

- A developer installs water and wastewater infrastructure for a housing subdivision and donates to the utility
- Customers in remote or special areas pay for installation of water and sewer lines
- Tap-in fees paid by the customer to install service lines and meters

How are Contributions accounted for on the book and records of the Company?

- Booked in accounts for Utility Plant In Service and CIAC
- Depreciated the same as other assets of the Company
- CIAC amortized as a reduction to depreciation expense
- For regulatory purposes, CIAC is a reduction to the utility's rate base

What are the accounting entries for booking CIAC?

Plant in Service (Accts. # 300)	XXX	Accumulated Amortization of CIAC (Acct. # 272)	XXX
CIAC (Acct. #271)	XXX	*Amortization of CIAC (Acct. #403)	XXX
*Depreciation Expense (Acct. #403)	XXX		
Accumulated Depreciation Expense (Acct. #108)	XXX		

*Net effect - **No depreciation expenses** are allowed on CIAC since they are **contributed capital**

Sources: Public Utility Accounting: Theory and Application, James E. Suelflow; National Association of Regulatory Utility Commissioners Uniform System of Accounts for Water and Wastewater Utilities

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